WHAT IS CLAIMED IS:

1. A light emitting device comprising an organic light emitting element, the organic light element having:

an anode;

a cathode;

an organic compound film containing a hole transporting material and an electron transporting material;

wherein the organic compound film has a structure which comprises in a direction from the anode to the cathode:

a hole transporting region made from the hole transporting material;

a first concentration change region in which the proportion of the electron transporting material increases gradually until a ratio between the hole transporting material and the electron transporting material becomes x : y (where x and y are positive constants);

a mixture region containing the hole transporting material and the electron transporting material at the ratio of x : y;

a second concentration change region in which the proportion of the electron transporting material gradually increases further from the x : y ratio; and

an electron transporting region made from the electron transporting material; and

wherein a light emitting region, into which a light emitting material for performing light emission is added, is formed within the mixture region.

2. A light emitting device comprising an organic light emitting element, the organic light element having:

an anode;

a cathode;

a hole injecting region formed contacting the anode;

an organic compound film containing a hole transporting material and an electron transporting material;

wherein the organic compound film has a structure which comprises in a direction from the anode to the cathode:

a hole transporting region made from the hole transporting material;

a first concentration change region in which the proportion of the electron transporting material increases gradually until a ratio between the hole transporting material and the electron transporting material becomes x : y (where x and y are positive constants);

a mixture region containing the hole transporting material and the electron transporting material at the ratio of x : y;

a second concentration change region in which the proportion of the electron transporting material gradually increases further from the x : y ratio; and

an electron transporting region made from the electron transporting material;

wherein a light emitting region, into which a light emitting material for performing light emission is added, is formed within the mixture region.

3. A light emitting device comprising an organic light emitting element, the organic light element having:

an anode;

a cathode;

an electron injecting region formed contacting the cathode; and

an organic compound film containing a hole transporting material and an electron transporting material,

wherein the organic compound film has a structure which comprises in a direction from the anode to the cathode:

a hole transporting region made from the hole transporting material;

a first concentration change region in which the proportion of the electron transporting material increases gradually until a ratio between the hole transporting material and the electron transporting material becomes x : y (where x and y are positive constants);

a mixture region containing the hole transporting material and the electron transporting material at the ratio of x : y;

a second concentration change region in which the proportion of the electron transporting material gradually increases further from the x : y ratio; and

an electron transporting region made from the electron transporting material; and

wherein a light emitting region, into which a light emitting material for performing light emission is added, is formed within the mixture region.

4. A light emitting device comprising an organic light emitting element, the organic light element comprising:

an anode;

a cathode;

a hole injecting region formed contacting the anode;

an electron injecting region formed contacting the cathode; and

an organic compound film containing a hole transporting material and an electron transporting material;

wherein the organic compound film has a structure which comprises in a direction from the anode to the cathode:

a hole transporting region made from the hole transporting material;

a first concentration change region in which the proportion of the electron transporting material increases gradually until a ratio between the hole transporting material and the electron transporting material becomes x : y (where x and y are positive constants);

a mixture region containing the hole transporting material and the electron transporting material at the ratio of x : y;

a second concentration change region in which the proportion of the electron transporting material gradually increases further from the x : y ratio; and

an electron transporting region made from the electron transporting material, and

wherein a light emitting region, into which a light emitting material for performing light emission is added, is formed within the mixture region.

5. A light emitting device according to any one of claims 1 to 4, wherein the light emitting region, into which the light emitting material is added, is a portion within the mixture region.

6. A light emitting device according to any one of claims 1 to 4, wherein a blocking material, having an energy difference between its highest occupied molecular orbital and its lowest unoccupied molecular orbital which is larger than that of the hole transporting material and the electron transporting material, is added to a portion within the mixture region.

7. A light emitting device according to claim 5, wherein:

a blocking material, having an energy difference between its highest occupied molecular orbital and its lowest unoccupied molecular orbital which is larger than that of the hole transporting material and the electron transporting material, is added to a portion within the mixture region; and

the light emitting region having the light emitting material added thereto is positioned closer to the anode than to the region having the blocking material added thereto.

8. A light emitting device according to any one of claims 1 to 4, wherein the light emitting material performs light emission from a triplet excitation state.

9. A light emitting device according to any one of claims 1 to 4, wherein mass percentage of the hole transporting material within the mixture region is greater than or equal to 10%, and less than or equal to 90%, with respect to total mass of the hole transporting material and the electron transporting material.

10. The light emitting device according to any one of claims 1 to 4, wherein the mixture region has a thickness greater than or equal to 10 nanometers, and less than or equal to 100 nanometers.

11. An electronic device using the light emitting device according to any one of claims 1 to 4.

12. The light emitting device according to any one of claims 1 to 4 wherein the light emitting device is a passive matrix type.

13. The light emitting device according to any one of claims 1 to 4 wherein the light emitting device is an active matrix type.

14. A light emitting device comprising:

an anode;

a cathode; and

an organic compound film containing a hole transporting material and an electron transporting material, the organic compound film comprising:

a hole transporting region comprising the hole transporting material adjacent to the anode;

an electron transporting region comprising the electron transporting material adjacent to the cathode;

a mixture region disposed between the hole transporting region and the electron transporting region and comprising the hole transporting material and the electron transporting

material at a constant proportion in a direction along the anode and the cathode, wherein the mixture region is doped with a light emitting material at least partly;

a first concentration changing region disposed between the hole transporting region and the mixture region wherein the proportion of the electron transporting material relative to the hole transporting material monotonically increases in the first concentration changing region in a direction from the hole transporting region to the mixture region; and

a second concentration changing region disposed between the mixture region and the electron transporting region wherein the proportion of the electron transporting material relative to the hole transporting material monotonically increases in the second concentration changing region in a direction from the mixture region to the electron transporting region.

15. The light emitting device according to claim 14 wherein said light emitting device is a passive matrix type.

16. The light emitting device according to claim 14 wherein said light emitting device is an active matrix type.

17. An electronic device comprising the light emitting device according to claim 14 wherein said electronic device is one selected from the group consisting of a video camera, digital camera, an image reproducing device, a mobile computer, a personal computer, a cellular phone, and an audio.

18. A light emitting device comprising:

an anode;

a cathode; and

an organic compound film containing a hole transporting material and an electron transporting material, the organic compound film comprising:

a hole transporting region comprising the hole transporting material adjacent to the anode;

an electron transporting region comprising the electron transporting material adjacent to the cathode;

a mixture region disposed between the hole transporting region and the electron transporting region and comprising the hole transporting material and the electron transporting material at a constant proportion in a direction along the anode and the cathode, wherein the mixture region is doped with a light emitting material at least partly;

a concentration changing region disposed between the hole transporting region and the mixture region wherein the proportion of the electron transporting material relative to the hole transporting material monotonically increases in the first concentration changing region in a direction from the hole transporting region to the mixture region.

19. The light emitting device according to claim 14 wherein said light emitting device is a passive matrix type.

20. The light emitting device according to claim 14 wherein said light emitting device is an active matrix type.

21. An electronic device comprising the light emitting device according to claim 14 wherein said electronic device is one selected from the group consisting of a video camera, digital

camera, an image reproducing device, a mobile computer, a personal computer, a cellular phone, and an audio.

22. A light emitting device comprising:

an anode;

a cathode; and

an organic compound film containing a hole transporting material and an electron transporting material, the organic compound film comprising:

a hole transporting region comprising the hole transporting material adjacent to the anode;

an electron transporting region comprising the electron transporting material adjacent to the cathode;

a mixture region disposed between the hole transporting region and the electron transporting region and comprising the hole transporting material and the electron transporting material at a constant proportion in a direction along the anode and the cathode, wherein the mixture region is doped with a light emitting material at least partly; and

a concentration changing region disposed between the mixture region and the electron transporting region wherein the proportion of the electron transporting material relative to the hole transporting material monotonically increases in the second concentration changing region in a direction from the mixture region to the electron transporting region.

23. The light emitting device according to claim 22 wherein said light emitting device is a passive matrix type.

24. The light emitting device according to claim 22 wherein said light emitting device is an active matrix type.

25. An electronic device comprising the light emitting device according to claim 22 wherein said electronic device is one selected from the group consisting of a video camera, digital camera, an image reproducing device, a mobile computer, a personal computer, a cellular phone, and an audio.